

State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3406 FAX (603) 271-7894



April 18, 2002 Letter of Deficiency DAM #044.03

Mr. Colin Contis Selectmen Town of Chester 1 Chester Street Chester, NH 03036

RE: Edwards Mill Dam, Chester

Dear Mr. Contis

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 3, 2001 and April 3, 2002. During this visual inspection and/or file review, the following deficiencies were observed:

There was brush on the crest and along the downstream toe of the right embankment wall;

- 2. There was a 2-foot deep sinkhole in the earthen crest of the right embankment, adjacent to the right spillway abutment wall and upstream face. Similar voids were noted in the October 11, 1995 LOD and were repaired;
- 3. There was seepage noted at the base of the spillway, in the vicinity of the low level outlets. This has been a reoccurring deficiency of which DES has requested monitoring by the dam owner;
- 4. The dam cannot pass the design storm event with one foot of freeboard and no operations;
- 5. Concrete refacing of the spillway discharge channel may require NHDES permit from Wetlands Bureau as well as from the Dam Bureau;
- 6. It is unclear whether the gate valves are operable; and
- 7 There is no operation and maintenance plan on file.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

June 3, 2002:

Submit a sketch and description of the proposed refacing work to the downstream spillway channel walls;

http://www.state.nh.us TDD Access: Relay NH 1-800-735-2964

Letter of Deficiency Dam #044.03 April 18, 2002 pg. 2

- 2. Prepare and submit to the DES a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel. Refer to the enclosed guidelines and example plan;
- 3. Comment on the operability of the low level gates;
- 4. Remove brush from the crest and from within 10 feet of the toe of the right embankment wall;
- 5. Repair the 2-foot deep sinkhole in the earthen crest of the right embankment, adjacent to the right spillway abutment wall and upstream face;

November 4, 2002:

- 6. Provide DES with the results of the investigation into the source of the seepage noted at the base of the spillway, in the vicinity of the low level outlets; and
- 7. Provide DES with a design to increase the discharge capacity of the dam so that the design storm event can be discharged with one foot of freeboard and no operations. This work should be included in the current repair plans for the masonry walls of the spillway channel.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Dam Safety Engineer

Attachments Guideline for an O&M plan, DB13

cc: Gretchen Rule
Town of Chester

Certified #7099 3400 00029773 6521

GEL/was/h:/safety/wendy/lod/044-03lod.doc